

ANNUAL REPORT

— OF THE —

Medical Officer of Health

AND

SANITARY INSPECTOR

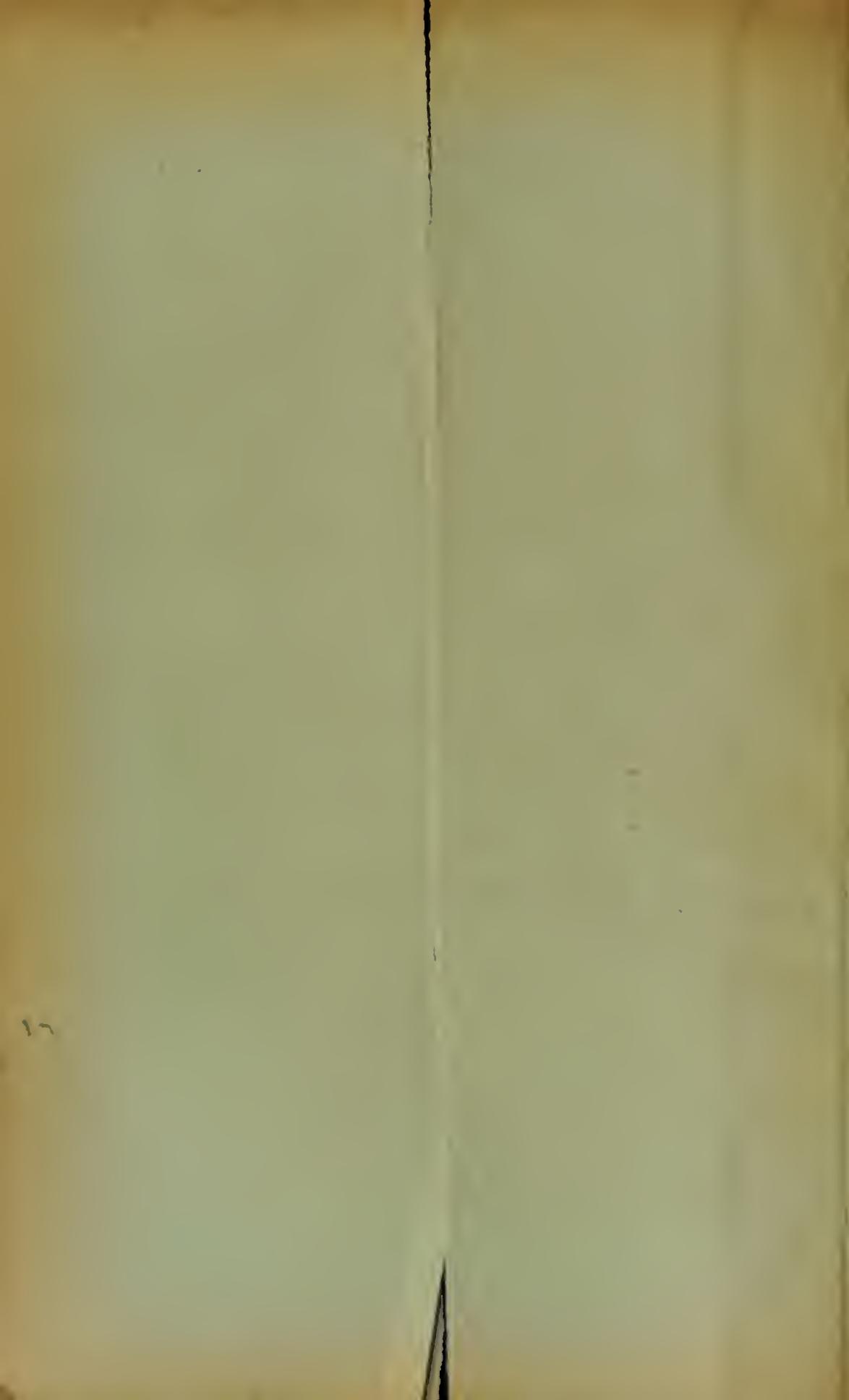
TO THE

CANNOCK URBAN DISTRICT COUNCIL

FOR THE YEAR 1896.

CANNOCK:

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GENTLEMEN.

I beg to submit to you my Annual Report on the Cannock Urban District for the year 1896, my first year of office, and I will endeavour to give at first in brief outline a general description of the District that I represent as Medical Officer of Health.

The Cannock Urban District has an acreage of 8,009 acres, and is divided into three Wards, as follows:

(1) CANNOCK WARD:—With an approximately estimated population of 7,156, excluding the Workhouse, and comprising Cannock town, Bridgtown, Stonefields, Leacroft, Old Fallow, Blackfords, with some outlying portions, e.g., Wedges Mills, etc.

(2) HEDNESFORD WARD:—With an approximately estimated population of 7,574, comprising Hedgesford town, Green Heath, Church Hill, Littleworth, Rawnsley, and Cannock Wood.

(3) CHADSMOOR WARD:—With an approximately estimated population of 7,277, and comprising Hightown, Chadsmoor, Heath Hayes, Wimblebury, with outlying portions, e.g., Hawkes Green, etc.

The population of each Ward has been calculated according to information kindly supplied me by Mr. Thos. Smith, rate collector.

Each Ward is represented by four members, who are elected for a term of three years, and who constitute the Cannock Urban District Council.

The geological character of the district is generally a gravelly sub-soil of the new red sandstone formation, with a mixture here and there of clay beds.

The streams that pass through the district are the following :—

(1) One starts from a spring near the Belt Cottage, at Huntington Wharf, about 580 feet above sea level, and runs along by the Stafford-road, which it crosses by the old Brick Works, lying between Stafford-road and Penkridge Old-road. It then crosses the New Penkridge-road, and finally empties itself into Wyrley Brook, near Wedges Mills, in the Cannock Ward, at an elevation of about 371 feet above sea water level.

(2) Another, starting from Hedgesford Pool (now dry), in the Hedgesford Ward, at an elevation of about 520 feet above sea level, crosses Market-street, Hedgesford, near the Post Office, and passes under Stafford-lane, then under the old Cannock-road, near the Globe Inn. It then runs through Hawkes Green, skirts the Cannock railway station, and finally empties itself into Wyrley Brook, at Wedges Mills.

(3) Another, starting from a spring at Pye Green, in the Hedgesford Ward, at an elevation of about 745 feet above sea level, passes No. 1 Plant, West Cannock Colliery, then under the Cannock-road by the West Cannock Colliery offices. It then passes under the Station-road, by the Hedgesford railway station, into the centre of Hedgesford Pool, where it divides into two branches, one forming the last mentioned stream, the other forming a brook leading into the Rugeley Valley, in the Rugeley parish.

(4) Another, starting from a spring near the Cemetery-road, close to a point called the Cannock Bog, at an elevation of about 622 feet above sea level, crosses the Cannock-road between Hightown and Chads Moor, and joins the brook marked (2) near the Globe Inn, at an elevation of about 497 feet above sea level.

(5) Another, starting from a spring at Broomhill, in the Chads Moor Ward, at an elevation of 575 feet, passes under the Huntington Terrace-road and the Cannock-road near Blackfords. It then passes under Crab-lane and Cannock Old-road near "The Hills," and joins there the brook marked (2), at an elevation of about 473 feet above sea level.

(6) Another, called the Wyrley Brook, enters the district near Streetway Farm, in the Watling-street-road, at an elevation of about 405 feet above sea level, passes through Washbrook-lane, Churchbridge, and, skirting the canal, finally empties itself into Saredon Brook, near Wedges Mills.

(7) Another, called Newland's Brook, the collecting area of which is the Heath Hayes Common, at an elevation of about 603 feet above sea level, passes under Hedgesford-road, Heath Hayes, then the Cannock-road, Heath Hayes, through Newland's-lane, and under the London and North-Western Railway, finally emptying itself into the Wyrley Brook, near Streetway Farm, at an elevation of about 421 feet above sea level.

(8) Another, entering the district near Gentleshaw Church (Hedgesford Ward), at an elevation of about 700 feet above sea level, skirts the parish boundary, passing out of the district near Redmore House, at an elevation of about 550 feet above sea level.

(9) Another, starts from a spring in the Old Park, Cannock Wood, at an elevation of about 650 feet, passes through Court Bank Cover, and finally joins the preceding stream at Redmore House.

(10) Another, called the Bentley Brook, starts from a spring in the Old Park, near the old Deer Barn, Cannock Wood, at an elevation of about 650 feet, and passes through Hazel Slade, skirting the Hazel Slade-road, and diverting into the Rugeley Valley, near the Cannock Chase Foundry, the elevation at the latter point above sea level being about 521 feet.

(11) Another, starting from a spring near Cooper's Coppice, Rawnsley, at an elevation of 768 feet, courses down past Wimblebury Farm to the Cross Keys, the elevation at the latter point being about 525 feet. It then divides into two branches, one of them emptying into the canal, the other terminating at Cannock Mill.

The surface features of the district consist of a series of undulations, gradually increasing in height as one travels from Wedges Mills, in the Cannock Ward, to Cannock Wood, in the Hedgesford Ward, the highest point being "Castle Ring," which is at an elevation of about 800 feet above sea level.

The district is not well wooded, but there are several small copses, *e.g.*, Broad Hazels, Court Bank Cover, New Hayes, in the Cannock Wood section of the Hedgesford Ward, the Belt and Cavan Woods in the Chadsmoor and Cannock Wards, the Dugdale Woods, near Wimblebury, in the Chadsmoor Ward, the Ashes, at Leacroft, in the Cannock Ward, and a part of Norton Lees Woods situated midway between Leacroft and Norton.

The surface formation of the district with its gravelly sub-soil renders it peculiarly adapted for the efficient filtration of surface waters, as witness, for instance, the excellency of the water supplied to the district by the South Staffordshire Waterworks Company.

The water supply of the district is supplied chiefly by this Company, who have two pumping stations, one in the Rugeley-road, and the other at Huntington, adjoining the Cannock Ward. They have also a Reservoir built on the Rawnsley Hills, in the Halesford Ward, at an elevation of about 750 feet above sea level. The water is ample in sufficiency, and very pure. Some of the water supply of the district is derived from wells.

The chief industry of the district is the coal, represented by the Cannock and Rugeley Collieries, the West Cannock Collieries, the East Cannock Colliery, the Cannock Chase Colliery, and Leneroft Colliery. There are also other industries, *e.g.*, Messrs. Bunnstedt and Chandler's Fountry at Halesford, Messrs. Whitehouse Bros., and Messrs. Whitehouse and Sons' Edge Tool Works at Bridgtown, Messrs. Gilpin's Edge Tool Works at Wedges Mills, Colonel Field's Brick and Tile Works at Littleworth, the Longhous' Brick and Tile Works, Bridgtown, the Walk Mill Brick and Tile Works, the Rimmer Hill Brick and Tile Works, and Brick Works at the West Cannock Collieries.

The mode of excrement disposal is chiefly the midden and ashpit system, the water carriage system being next in vogue. The ashpits are periodically emptied by contract.

The household slop and refuse matters are disposed of generally by a system of sewerage, which in some parts of the district is very imperfect, and notably so in Heath Hayes, which is a rapidly growing hamlet. It is to be hoped that the Urban District Council's negotiations with the Local Government Board with regard to the new sewerage scheme, embracing especially Heath Hayes, the sewage to be brought on to the Sewage Farm, will prove successful. Green Heath, in the Halesford Ward, also requires a more complete system of the sewerage, as does also Chadsmoor, and Stonefields, in the Cannock Ward, is in like want.

The Cannock Sewage Farm is 60 acres in extent, and situated in the Cannock Ward. It is bounded on two sides by the Wolverhampton-road leading from Cannock, and the Watling-street-road leading from Bridgtown. It is worked on the broad irrigation principle, combined with a special filtration area of four acres.

We have no Isolation Hospital for the reception of general infectious disease, but in 1894, during a visitation of Smallpox in the district, a building capable of accommodating from 12 to 15 patients, was secured on a lease, near the Cannock Cemetery, and thanks to the efforts of my predecessor and the Sanitary Inspector, the disease was effectually stamped out, and there has been no further recurrence.

I will now deal with the vital statistics and general health of the district for the past year.

The number of Births registered for the year 1896 is 780, which includes 392 males, and 388 females, and, calculated on a population of 22,000 to Midsummer, 1896, gives a birth rate per 1000 per annum of 35·45, as against an annual birth rate of 41 per 1000 for the year 1895. The natural increase of population is 402. The annual birth rate in England and Wales is now little over 30 per 1000, so that the preceding year showed a high birth rate in this district, and the year 1896 that above the average. The total mean birth rate for the past ten years is approximately 41·12.

The number of Deaths registered for the year 1896 is 378, which, on a similar calculation, gives a death rate per 1000 per annum of 17·18, as against a death rate in the preceding year of 16·5. The proportionate mortality per 1000, per annum, at all ages, and from all causes in the three Wards of the district, and calculated on the estimated population of each Ward, is

Cannock Ward (excluding the Workhouse)...	14·39
Hednesford Ward	15·84
Chadsmoor Ward	14·97

The total mean death rate from all causes for the past 10 years is 18·78, the mean death rate from the seven principal Zymotic diseases during the same period being 1·71.

(1) Cannock Ward.—In this ward 30 deaths (excluding the Workhouse in which 2 deaths occurred) have been recorded for the year, indicating a rate of 4·20 per 1000 per annum on the estimated population of this ward.

(2) Hednesford Ward.—In this ward 47 deaths have been recorded, indicating a rate of 6·20 per 1000 per annum on its estimated population.

(3) Chadsmoor Ward.—In this ward 49 deaths have been recorded, indicating a rate of 6·73 per 1000 per annum on its estimated population.

Births.

Deaths.

Deaths under
1 year.

Deaths per cent.
on number born
during the year.

The infantile mortality in the three wards, reckoned upon the births registered during the year, is at the rate of 16·41 per cent., as against 14·4 per cent. for the preceding year.

The total deaths under 1 year in the district amount to 128, which is at the rate of 5·8 per 1000 per annum, as against 5·9 for the preceding year.

The heavy percentage of infantile mortality is explained by the following facts, viz.:—(1) 33 died from Bronchitis and Pneumonia, or 25·7 per cent. (2) 23 died from Marasmus, or 17·9 per cent. (3) 21 died from Premature Birth, or 16·4 per cent. (4) 18 died from Convulsions, or 14·3 per cent. Five died from Measles, 6 from Whooping Cough, 5 from Tuberousis, 5 from Atelectasis or imperfect aeration of lungs, 4 from Diarrhoea, 1 from Scarlet Fever, 1 from Cirrhosis, 1 from Erysipelas, 2 from Natural Causes, and 3 from Indigestion.

A glance at the above figures will show that despite the deaths from unavoidable causes, a good many of them would in my opinion be avoided by a systematic instruction of the mothers as to the proper feeding and clothing of infants, especially those who are artificially fed. The institution of a Women's Health Society, if we may so call it, in the district, for the purpose of diffusing instruction upon infant feeding, cleanliness, and clothing, would no doubt lessen our infantile mortality, and it is to be hoped that the course of lectures, embracing Hygiene, given by Miss Lonsdale, in the district, will help to bring about the desired effect. The necessary holding of inquests upon illegitimate infants, where no medical help has been obtained, will also be a salutary factor in future in lessening infantile mortality.

Below is given the number of deaths from the various diseases named:

Smallpox	None.
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Measles.

Seven deaths occurred in the Cannock Ward, 9 in the Halesowen Ward, and 9 in the Chadmoor Ward, total 25, which gives a death rate of 1·13 per 1000. Of these deaths 23 occurred under 5 years. There was one death recorded for the whole district in the preceding year.

Scarlet fever.

Two deaths occurred in the Cannock Ward, 1 in the Halesowen Ward, and 2 in the Chadmoor Ward, total 5, of which 3 occurred under 5 years, and 2 over 5 years old, and indicating a death rate per 1000 of .22.

There has been no death from this disease, and none in the preceding year.

There has been 1 death (under 5 years), which occurred in the Cannock Ward, against 1, also under 5 years, in the preceding year.

There has been 1 death (over 5 years), which occurred in the Chadsmoor Ward, against 3 deaths, all over 5 years, recorded for the whole district in the preceding year.

There has been no death from this fever, and none in Puerperal Fever, the preceding year.

There has been 1 death, under 5 years, which occurred in the Cannock Ward, against none recorded in the preceding year.

Five deaths occurred in the Cannock Ward, 5 in the Hedgesford Ward, and 3 in the Chadsmoor Ward, total 13, which gives a death rate of '59 per 1000, and of which 11 were under 5 years; against 7, all under 5 years, recorded for the whole district in the preceding year.

Two deaths occurred in the Cannock Ward, 3 in the Hedgesford Ward, and 4 in the Chadsmoor Ward, total 9, indicating a death rate of '4 per 1000, and of which 6 were under 5 years; against 15 deaths in the whole district for the preceding year.

Two deaths occurred in the Cannock Ward, both over 5 years, against the same number in the whole district for the preceding year.

Four deaths occurred in the Cannock Ward, 11 in the Hedgesford Ward, 8 in the Chadsmoor Ward, and 4 in the Workhouse, total 27, with a ratio of nearly 1·23 per 1000, and of which 19 occurred over 5 years; against 16 for the preceding year, with a ratio of '76 per 1000. The proportionate mortality from Phthisis per 1000 per annum in the three wards, calculated on the estimated population of each ward, is

Cannock Ward (excluding the Workhouse) ...	'55
Hedgesford Ward	1·45
Chadsmoor Ward	1·09

The mean annual death rate from Phthisis per 1000 living in England from 1886-1890 was 1·64.

The deaths recorded in each ward are as follows:-

Cannock Ward. In Bridgtown, 1 infant aged 17 months, and 1 married woman aged 24. In Cannock a labourer aged 46, and a child aged 3 years.

Diphtheria.

Membranous Croup.

Typhoid Fever.

Puerperal Fever.

Erysipelas.

Whooping Cough.

Diarrhoea.

Rheumatic Fever.

Phthisis.

Hednesford Ward.—In Hednesford, 2 single women with respective ages of 18 and 30 years, 2 infants with respective ages of $3\frac{3}{4}$ months and 11 months, 2 married women with respective ages of 34 and 48 years, 3 miners aged respectively 19 years, 50 years, and 52 years, and a grocer aged 59 years. In Cannock Wood, a married woman aged 43.

Chadsmoor Ward.—In Hightown and Chadsmoor, 2 married women aged 23 years and 35 years, 2 miners aged 29 years and 53 years, and 1 infant aged $1\frac{1}{4}$ months. In Heath Hayes, 3 children aged respectively $1\frac{1}{2}$ months, 4 months, and 3 years.

This fatal disease may justly be regarded as preventible. It has an established relationship to dampness of soil and density of population. Compared with other industrial districts, we are comparatively free from Phthisis, though not so free as we should be. The coal dust inhaled by the miner is not so irritating and injurious to the bronchial passages as other kinds of trade dust. The natural elevation of the district with its dry gravelly sub-soil are favourable to the reduction of the disease. Foul air is a most potent cause in the production of Phthisis, and if in this district there were less over crowding in houses, and a cessation of oil-lamp burning in bedrooms which have no fireplaces, or else the latter are stopped up, impeding ventilation, we should find the death rate from Phthisis lower than what it is. It is a wise precaution to boil cow's milk before consumption, especially when the source of the milk is unknown, and might possibly be tubercular.

Bronchitis,
Pneumonia, and
Pleurisy.

Twenty-one deaths occurred in the Cannock Ward, 35 in the Hednesford Ward, 30 in the Chadsmoor Ward, and 3 in the Workhouse, total 89, with a ratio of 4·04 per 1000, and of which 62 were under 5 years; against 84 for the whole district in the preceding year, with a death rate of 4 per 1000. The proportionate death rate per 1000 in each ward, calculated on their respective populations, is approximately as follows:

Cannock Ward ... 2·9	Hednesford Ward ... 4·6
Chadsmoor Ward	4·1

The mean annual death rate per 1000 living in England for Diseases of the Respiratory System, excluding Phthisis, from 1896–1890 was 3·64.

The following table used by my predecessor shows the mortality from these diseases for the past 10 years:

	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896
Under 5	29	30	47	37	83	39	33	55	45	62
Above 5	30	32	33	37	63	48	46	38	39	27
	59	62	80	74	116	87	79	93	84	89

The prevalence of these diseases is aggravated by the influence of the keen air of the district upon persons predisposed from fatigue, debility, poverty, filth, and over-crowding in houses.

Six deaths occurred in the Cannock Ward, 7 in the Hedgesford Ward, 8 in the Chads Moor Ward, and 7 in the Workhouse, total 28, with a ratio of 1·27 per 1000, and all over 5 years; against 24 recorded for the preceding year, all over 5 years, and with a death rate of 1·14.

Seven deaths occurred in the Cannock Ward, 5 in the Hedgesford Ward, and 9 in the Chads Moor Ward, total 21, which would give a death rate of 26·92 per 1000 births registered, or a death rate per 1000 of population of '95.

Five deaths occurred in the Cannock Ward, 4 in the Hedgesford Ward, 1 in the Chads Moor Ward, and 2 in the Hedgesford Accident Home, total 12, with a ratio of '545 per 1000; and of which 7 occurred over 5 years, and 5 under 5 years of age; against 10 for the preceding year, with a ratio at per 1000 of population of '476.

Subjoined are the chief details of the respective injuries:—(1) Jan. 14th, man unknown, about 25 years, found dead on towing path of canal at Mill Green, Cannock, cause of death being suffocation by drowning, inquest. (2) Feb. 17th, Isaac Darrell, 37 years, Hightown, colliery stallman, from burns received through an explosion of gas at the West Cannock Colliery, inquest. (3) May 4th, Charles Lockley, 19 years, accidentally killed by being thrown from a cart near Rimer Hill Brickyard, inquest. (4) June 11th, John Cooksey, 25 years, hanged himself in the Hedgesford Police Station, inquest. (5) July 2nd, Frank Gunn, 3 years, Wolverhampton-road, Cannock, accidentally killed by the wheel of a cart passing over him, inquest. (6) Aug. 3rd, John Edward Sirdifield, 3 years, killed by the wheels of a trap passing over him in the Rugeley-road, Hedgesford, inquest. (7) Sept. 20th, Harold Reynolds, 6 years, New Hall-street, Cannock, affecation caused by the attempted swallowing of a damson, inquest. (8) Oct. 8, A. Watkins, 14 years, accidentally killed at the East Cannock Colliery, inquest. (9) October 24th, John Hyden, 3 years, died in the Hedgesford Accident Home from burns accidentally received, inquest. (10) Nov. 9th,

Deaths from
Premature Birth

Injuries.

Nellie Clunsey, 3 years, died in the Hedgesford Accident Home from accidental burns, inquest. (11) Nov. 17th, Catherine Dooley, 8½ years, found dead on Lees Common, Hedgesford, from failure of the heart's action, consequent upon the injuries received and exposure to cold, inquest. (12) Dec. 25th, Edward P. Shemillt, 3 years, Canoeck, from accidental burns, inquest.

Besides the inquests held on the above injuries, inquests have been held on the following:—(1) John Austin, 63 years, Green-lane, Bridgtown, death from synapse, accelerated by exposure to cold. (2) Premature Birth in Wimblebury.

Deaths from all other Diseases.

Forty-one deaths occurred in the Canoeck Ward, 40 in the Hedgesford Ward, 34 in the Chads Moor Ward, and 30 in the Workhouse, total 135, with a ratio of 6·59 per 1000, and of which 85 were over 5 years; against a total of 181, with a death rate per 1000 of 8·6 in the preceding year.

Deaths under 5 years.

(1) Canoeck Ward.—In this ward 60 deaths have been recorded, excluding the Workhouse in which 3 deaths occurred, indicating a death rate of 8·49 per 1000 on the estimated population of this ward.

(2) Hedgesford Ward.—In this ward 66 deaths have been recorded, indicating a death rate on its estimated population of 8·71 per 1000, this excluding the two deaths occurring in the Hedgesford Accident Home.

(3) Chads Moor Ward.—In this ward 69 deaths have been recorded, indicating on its estimated population a death rate of 9·48 per 1000.

The total deaths for the whole district amount to 200, which is at the rate of 9·09 per 1000, as against 7·7 for the preceding year.

Zymotic Disease.

The deaths from Zymotic Disease number 53, as applied to the seven principal Zymotic Diseases, viz., small-pox, measles, scarlet fever, diphtheria, whooping cough, enteric fever, and diarrhoea, which gives a death rate per 1000 of 2·4; as against 29 deaths for the preceding year, giving a death rate of 1·38, the latter being nearly equalled by the death rate from measles alone in 1896. The death rate from all other causes besides this class of disease is 14·77 per 1000, as against 15·14 for the preceding year.

Deaths in the Workhouse.

Forty-four deaths occurred in the Workhouse, 3 under and 41 over 5 years of age. Of the latter 24 occurred at ages of 65 and upwards, the oldest being 98. 27 deaths occurred among persons belonging to the district, and 17 among persons from other districts.

Mr. Gatward, the master, kindly informs me that the average number of inmates during the year is 245, and that no vagrants admitted during the past year to the wards have died there. The death rate per cent. last year would approximately be 17·95 estimated on the average number of inmates.

The number of deaths recorded as not certified is 15, of which 11 were under 5 years, against 10 recorded in the preceding year. They occurred as follows :

Uncertified Deaths.

(1) Cannock Ward.—Six occurred in this ward, 4 of them being at ages of 1 hour each, from premature birth, and 2 at respective ages of 18 hours and 77 years, from natural causes.

(2) Huddersfield Ward.—One death occurred at 41 years from apoplexy.

(3) Chadsmoor Ward.—Eight deaths occurred in this ward, of which 3 were from premature birth, 2 from convulsions, aged respectively 1 hour and 5 months, 1 from natural causes at 11 months, 1 from senile decay aged 92 years, and 1 from heart disease aged 40 years.

This Act has been adopted in your District from the 1st of June, 1894. The number of cases notified under this Act has been 262 for the year 1896, which is abnormally large compared with the number notified in the preceding year which was 98. The reason of this is due to scarlet fever, which assumed an epidemic form throughout the entire district, no fewer than 212 cases occurring during the year, a rate of 80 per cent. upon the sum total of diseases notified. This epidemic prevalence has not been limited to this district, it has been general throughout the country. I will now take the notifiable diseases in their order.

Fortunately, as in the preceding year, we have had no case notified from this disease, though I feared last spring the possibility of its introduction by means of the canal boats from Gloucester, where there was a serious epidemic of the disease. I visited the canal wharves both at Huddersfield and Leekfoot, and left instructions for a strict supervision of the boats, which, however, were disinfected before entering the district.

Notification of Infectious Diseases Act.

Smallpox

The cases in the district from this disease occurred as follows :

Cannock Ward.—Sixteen occurred in the Cannock portion of this ward in 12 houses, 45 in 17 houses in the Bridgtown portion, and 19 in 9 houses in the outlying portions—in one instance 7 cases occurring in one family, the total number being 80 in 38 houses.

Scarlet Fever.

Hednesford Ward. Thirty-four cases occurred in 23 houses.

Chadsmoor Ward. In the Hightown and Chadsmoor portion 13 cases occurred in 12 houses, in the Wimblebury portion 17 cases in 12 houses, in the Heath Hayes portion 63 cases in 37 houses, and in an outlying portion 5 cases all in one house; the total number being 98 cases in 62 houses.

The sum total for the three wards equalled 212 cases in 123 houses.

The disease, fortunately, has been of a mild type, the case mortality being 2·3 per cent. I visited the families attacked, and recommended disinfectants to be kept at three different stations, viz., Cannock, Hednesford, and Heath Hayes, besides issuing circulars containing hints upon the prevention of the disease, with instructions for disinfection, together with a caution as regards the penalties of negligent exposure. Nothing short of hospital isolation can be relied upon, however, and it is practically impossible to get the necessary seclusion in a working class household. The occurrence of slight cases also renders preventative measures more difficult, a sore throat or slight desquamation escaping notice, and yet capable of spreading infection. The facility for spreading is also increased by the fact of long rows of cottages having backyards in common, and where there is a general mixing up, so to speak, of different families. In some of my visits to the infected houses I found defective drainage and insanitary injurious to health, conditions in which persons are rendered more susceptible to the disease, and which would possibly form a soil for its growth and spread. Take, for instance, undrained Heath Hayes, where 63 cases occurred, out of a total of 98 cases notified for the whole ward (Chadsmoor), and constituting nearly 30 per cent. of the number notified for the whole district. It is high time that Heath Hayes should be efficiently drained and sewered. Bridgtown, in the Cannock Ward, follows Heath Hayes closely in severity, 45 cases occurring there in 17 houses, and when visiting the infected houses I had occasion in two instances to condemn the condition of ash-pits and privies. With regard to hospital isolation for this disease, I would suggest that our present Smallpox Hospital be used for the reception of patients, especially those being in or near crowded households, and that a Smallpox Hospital be built at a suitably remote distance from surrounding dwellings. Even as things are at present, I believe that if disinfection were thoroughly carried out according to instructions and the patients isolated where possible, the number of cases would be reduced and thereby the cost of notification.

Four cases were notified in the Cannock Ward, 3 of them being in one house at High Green, Cannock, in June, and where was found on the rear premises a catch pit leading directly to the sewer without being trapped. This was, of course, remedied. There were none notified in the Halesford Ward, but one case occurred at Wimblebury, in the Chadsmoor Ward.

Diphtheria

Two cases were notified, one in the Cannock Ward, and one in the Chadsmoor Ward.

Meningo-
Cerebral
Group

Five cases were notified. Three cases occurred at Cannock in separate houses, and in one instance I found defective house disconnection, which was remedied. One case occurred at Rawnsley, in the Halesford Ward, and one (fatal) at Heath Hayes, in the Chadsmoor Ward.

Typhoid Fever.

Two cases were notified in Halesford.

Puerperal Fever

Thirty-six cases were notified, of which 21 were in the Cannock Ward, 11 in the Halesford Ward, and 4 in the Chadsmoor Ward. There was one fatal case (under 5 years) in the Cannock Ward. All these cases occurred in separate houses, and caused probably by cold and damp. Inefficient ventilation and drainage no doubt render persons more susceptible to the disease. In a case visited by me at Heath Hayes, I had occasion to condemn the ashpit and privy attached to the premises.

Erysipelas.

Erysipelas is at the present day chiefly met with in the sporadic form, and ceases to have that importance that was attached to it formerly when virulent outbreaks occurred in surgical wards from the neglect of sanitary essentials. Acquisition of infection from a case is generally through unsound skin or mucous membrane.

I will now take a non-notifiable disease which was largely prevalent in the district last year. In the latter part of January an outbreak of Measles occurred at Chadsmoor and Hightown, and on January 30th there were 361 absentees out of a total of 1042 scholars in the Chadsmoor National and Board Schools, which fact combined with the medical evidence of the prevalence of Measles, determined me to advise closure of the schools for four weeks. The Sunday Schools of this district were also closed by my request. In March the disease spread into Green Heath in the Halesford Ward. The West Hill Board Schools, and the temporary Infants' School in Bradbury lane, and Sunday Schools were

Measles

closed for a period of six weeks. In April the Walsall Road Board Schools, the Cannock Endowed Infants' and National Schools, in the Cannock Ward, were closed for four weeks, owing to the prevalence of the disease there, and in June the Heath Hayes Infants' and temporary Infants' Schools were likewise closed for three weeks. Church Hill and Littleworth, in the Halesowen Ward, were also visited by the disease, but not to the extent of justifying school closure. As shown in the Report, there were 25 fatal cases, giving a death rate of 1·13 per 1000, the secondary cause of death being generally Bronchitis and Pneumonia. It has been contended that school closure as a preventative is of little use, but I believe in a district like this it is a means of checking the spread of the disease. There are two sources of difficulty to contend with in the prevention of this disease, which justifies school closure, viz.:

(1) That infection begins at least three days before the rash appears.

(2) That there is usually an incubation period of twelve days, necessitating a fortnight's quarantine before those exposed to infection can be considered safe. Home isolation being impossible, it is not right that we should multiply these difficulties by allowing children to be sent to school from homes scattered over various portions of the district, these homes subsequently forming separate foci of disease.

Besides this, we have to consider the case mortality, which, in severe epidemics, would affect the general death rate.

In the course of my sanitary rounds during the year, I have condemned by quantitative analysis well waters supplying 49 houses, with the result that the wells have been closed, and water supplied by the South Staffordshire Waterworks Company.

I have also had occasion to report upon and condemn several misuses.

I have paid visits to the Smallpox Hospital, the rooms of which by my advice have been whitewashed, distempered, and thoroughly cleaned throughout.

The Sewage Farm also has been visited by me on several occasions, and I have taken monthly samples of the effluents, and subjected them to a quantitative analysis. With regard to the working of the Sewage Farm, it will be

best effected by the Urban District Council having the direct control and management of the farm, and I am pleased to say this has recently been arranged. I believe that the farm properly managed will deal satisfactorily for some time to cope with the screened sewage of the district, but I would recommend the eventual use of precipitation tanks, the effluents from which to be distributed over the farm lands before finally passing into outside streams, and then there will be no fear of incurring penalties under the Rivers Pollution Acts.

Mr. Peake, the Surveyor and Sanitary Inspector, kindly informs me that the number of yards of water mains laid by the South Staffordshire Waterworks Company is 1900, as against 1025 in the preceding year, and that these were laid in the following localities, viz., West Chads Moor, New-street, Bridgtown, Bradbury-lane, Hedgesford, and Simms-lane, Cannock. He also states that the number of houses supplied with water by the Company during the year is 200, and that that the number of houses built during the year is 76, against 55 built in the preceding year; the total number of houses in the district for the year 1896 being 4065.

Additional Water Supply.

The returns of new cases of pauper sickness throughout *Pauper sickness* the district during each fortnight for the past year show that from chest affections the Chads Moor Ward (chiefly the High-town and Chads Moor portion) suffered more than the other two wards combined. The Measles epidemic also affected this ward similarly, but in a bigger proportion. The Hedgesford Ward shows a greater number of chest affections than the Cannock Ward, but a smaller number of Measles cases. With regard to tubercular disease, the Hedgesford and Chads Moor Wards show equal returns, the Cannock Ward having the least number. Hedgesford Ward shows the greater number of rheumatism cases, followed closely by Cannock Ward. Cases of starvation and improper feeding of infants have also been recorded in the returns. With regard to infectious disease, there has been no Scarlet Fever reported, but 12 cases of Measles occurred in the Workhouse.

Mr. F. G. Roach, the Vaccination Officer, has kindly supplied me with a return, in which the Births are stated as 779, the number successfully vaccinated 441, dead unvaccinated 76, and postponed vaccinations 4, the number unvaccinated being 258. The ratio of vaccinations to births is .566, against .538 for the preceding year. Mr. Roach states that of the number unvaccinated at least 50 per cent. will, in the ordinary course of events, be vaccinated within the next six months.

Primary Vaccinations.

I append the Tables required by the Local Government Board and the County Council, and beg to remain,

Your obedient Servant,

J. NORTHEY PHILLIPS.

Hednesford,

March 10th, 1897.



CANNOCK URBAN SANITARY DISTRICT

(A)

TABLE OF DEATHS during the Year 1896, in the Cannock Urban Sanitary District.

NAME OF LOCALITY adopted for the purpose of these Statistics : public institutions being shown as separate localities.	MORTALITY FROM ALL CAUSES, AT SEPARATED AGES.								MORTALITY			
	At all Ages	Under 1 year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards		Scarlatina	Diphtheria	Membranous Croup	
a	b	c	d	e	f	g	h	i	j	k	l	
Cannock Ward	103	30	30	5	4	20	14	Under 5 5 upwds.	2	1	1	
Hednesford Ward	120	47	19	6	2	28	18	Under 5 5 upwds.	1	1		
Chadsmoor Ward	109	49	20	2	2	26	10	Under 5 5 upwds.	1			
H'ford Accident Home	2		2					Under 5 5 upwds.				
Workhouse	44	2	1	2	3	12	24	Under 5 5 upwds.				
Totals ... {	378	128	72	15	11	86	66	Under 5 5 upwds.	3	2	1	

(B)

TABLE OF POPULATION, BIRTHS, and of NEW CASES OF ILLNESS in the year 1896, in the Cannock Urban Sanitary District.

NAME OF LOCALITIES adopted for the purpose of these Statistics : Public Institutions being shown as separate localities.	POPULATION AT ALL AGES.				New Cases of Sickness in each Locality, commencing in 1896.						
	Census 1891.	Estimated to middle of 1896.	Registered Births	Suspect.	Scarlatina	Diphtheria	Meningo-cerebral	Typhus			
a	b	c	d	e	f	g	h	i	j	k	l
Cannock Ward					Under 5 5 upwds.	35	4				
Hednesford ...	20613	22000	780	Under 5 5 upwds.	45	3	1				
Chadsmoor ...				Under 5 5 upwds.	18						
Workhouse				Under 5 5 upwds.	16						
Totals ... {				Under 5 5 upwds.	46						
					99	1	1				
					143	1	1				

MILITARY AUTHORITY.

Sanitary District; classified according to DISEASES, AGES, and LOCALITIES.

SICKNESS, coming to the knowledge of the Medical Officer of Health, during
classified according to DISEASES, AGES, and LOCALITIES.

ANNUAL REPORT
— OF —
The Sanitary Inspector
— TO THE —
URBAN DISTRICT COUNCIL OF CANNOCK
FOR THE YEAR 1896.

GENTLEMEN,

I have pleasure in presenting my fifth Annual Report of the work carried out in my Department for the year ended December 31st, 1896.

During the year I and my Assistant have made 2787 inspections of premises throughout the District, and have detected 248 nuisances of various descriptions, the particulars of which are appended in the Summary to this Report.

In compliance with the various sections of the Public Health Act, 1875, 56 legal notices and 192 preliminary notices were served for the abatement of the nuisances, of which 239 have been satisfactorily complied with. The remaining nuisances, still unabated, are carried forward to be dealt with.

In order to enable the members of the Council to see at a glance the various descriptions of nuisances which have been detected and dealt with during the above period, I have again introduced a summary showing the number of nuisances, number of notices, and the number which have been complied with.

The area of the Urban District of Cannock is estimated at 8009 acres, and the population at the end of the year 1896 22,306.

The following are particulars showing the population of the District in the year 1891, and the annual increase to the 31st December, 1896.

Average
Population.

Population of the Urban District, as per census			
1891	...	...	20,613

Number of Houses erected from January 1st, 1891, to Dec. 31st, 1896, and the increase of Population in each year:

	Houses Erected.	Increase of Population.
Year ended Dec. 31, 1891	38	209
" " 1892	14	77
" " 1893	72	423
" " 1894	48	264
" " 1895	55	302
" " 1896	76	418

The following are particulars of the number of houses and population in each ward on the rate book to June 30th, 1896:

	Houses.	Population.
Cannock Ward	1301	7156
Chadsmoor Ward	1323	7277
Hednesford Ward	1377	7574
<hr/>	<hr/>	<hr/>
Total	4001	22007

New Buildings.

During the year 56 plans for the following new buildings were submitted, and approved of by the Finance and Building Committee:

New Rooms	...	...	...	5
Conversion of House into two	...	...	...	2
Conversion of Pigstyes into Storerooms	...	...	...	2
Houses	...	...	...	76
Pigstyes	...	...	...	29
Bakehouses	...	...	...	2
Extension of Office	...	...	...	1
Workshops	...	...	...	4
Shops	...	...	...	4
Closets	...	...	...	7
Enlargement of School	...	...	...	1
Stables	...	...	...	6
Coach Houses	...	...	...	3
Warehouse	...	...	...	1
Slaughter House	...	...	...	1
Water Closets	...	...	...	5
Urinal	...	...	...	1
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Total	...	...	...	150

The number and descriptions of buildings which were not commenced at the end of the year are as follows:

Additional Room ...	...	...	1
Houses ...	...	...	9
Pigstyes ...	...	...	4
Enlargement of School ...	...	...	1
Shops ...	...	...	3
Bakehouse ...	...	...	1
			—
		Total ...	19

During the erection of the buildings, periodical inspections were made, and in several instances the buildings were not being constructed in accordance with the approved plans and bye-laws. The usual notices were served to pull down the defective work, which were complied with, and the building satisfactorily completed.

Water Supply.

During the year the usual inspections have been made throughout the District, as to the condition of the water used for drinking and domestic purposes, also as to the sufficiency of such supply.

In several cases samples of water have been taken from wells by the Medical Officer of Health, and condemned by him as unfit for drinking or domestic purposes.

The number of houses which were supplied with this impure water was 19, including 13 houses situated in New-street, Bridgtown, 6 of which obtained their supply from wells, and the other 7 from a small hand pump, fixed in the field, which pumped up the water from the adjacent brook.

These were reported to you, and instructions given to serve the usual notices to provide a proper supply of wholesome water, which were complied with, and the South Staffordshire water laid on.

During the year the South Staffordshire Waterworks Company have supplied 200 houses with their water, and laid 1900 additional yards of water mains in the following parts of the District, viz. :

West Chads Moor, New-street, Bridgtown,
 Bradbury-lane, Hedgesford, Simms-lane, Cammock,
 Bank-street, Five Ways.

In my previous Report I mentioned a number of houses in the neighbourhood of West Chads Moor, near the Tramway, which had not a sufficient supply of wholesome water. I am now pleased to report that the South Staffordshire water has been laid on to these and many others in that locality.

I am pleased to report that every reasonable facility has been made by the South Staffordshire Waterworks Company, by extending their water mains, to enable property owners to accommodate their tenants with a sufficient supply of wholesome water.

In various parts of the District considerable progress has been made in this direction, which I am pleased to say has resulted in a marked improvement of the cleanly and happy appearance of the occupants and homes.

With the exception of a few isolated portions of the District, the property owners have now the opportunity of supplying their tenants with water direct from the main, without having to resort to the unsatisfactory system of storage cisterns.

With regard to Cannock Wood, an outlying district, I have nothing to add to the remarks in my previous Report. The district is sufficiently supplied with water, of which I have not received any complaints.

House Drainage

During the year inspections have been made throughout the District as to the general condition of House Drainage, and upon such inspections have detected 46 nuisances arising from various structural defects, the particulars of which will be found under the heading of House Drainage in the statistics given.

In many cases no system of drainage existed, and the refuse was poured down an open channel and left to find its way into the soil. Other nuisances found were defective traps, stoppage of drains, and in several instances the drains were in such a dilapidated condition, which necessitated their reconstruction. For the abatement of these nuisances the usual notices were served, and the works recommended by me satisfactorily carried out.

During the year 59 drains have been constructed, 54 of which were connected with the main sewers, and 5 with cess-pools, which are recorded in the Drainage Books for reference.

The premises to which drains have been laid and connected with the main sewers are as follows:

Houses	...	...	...	153
Workshop	...	...	...	1
Water Closets	...	...	...	19
Accident Home	...	...	...	1
Pigstyes	...	...	...	21
Stables	...	...	...	2
Urinals	...	...	...	2
				-199

The premises to which drains have been laid and connected with cesspools are as follows:

Houses	...	...	...	5
Stable	...	...	...	1
Total	...			6

With regard to Private Streets, in various parts of the District, where provision is not yet made for receiving house refuse, I have nothing to add to the remarks in my previous Report.

During the year inspections have been made throughout the District as to the general condition of Privies and Ashpits. Sixty-eight nuisances of various descriptions have been detected, the particulars of which will be found in the statistics given. The usual notices were served on the property owners to abate the nuisances, and in all cases, except six, the work satisfactorily carried out. The nuisances unabated are carried forward on the books to be dealt with.

In several cases where I have found privies and ashpits (at the better class houses) in such a dilapidated condition as to necessitate re-constructing, I have recommended them to be pulled down, and proper water closets substituted. My recommendations were accepted by the owners, and the work carried out to my satisfaction.

The removal of night soil for the District was undertaken by Mr. Enoch Blewitt, contractor, Hedgesford, at a cost of £425, the amount of his contract for the first year ended 31st December, 1896.

During the year the Contractor has emptied 2,539 ashpits. Inspections were made of the works, and the ashpits which were found not satisfactorily cleansed, the Contractor's attention was called, and the complaint remedied. I have again to report that the work carried out by the Contractor has generally been found satisfactory.

The total number of Slaughter Houses on the Register is 27, as against 29 in the previous year. Slaughter Houses Nos. 11 and 26 have been closed on account of a change of tenant in another trade. One transfer license has been granted to Mr. James Smith, grocer, Hedgesford, to occupy and use Slaughter House No. 17.

During the year inspections have been made, and the usual instructions given for cleansing the slaughter houses and fasting pens, which were satisfactorily carried out.

Privies and
Ashpits.

Night Soil
Removal

Slaughter
Houses.

Friends.

Smallpox
Hospital.

The number of Urinals belonging to the Council is four, which are situated at Cannock and Halesowen. During the year these have been regularly cleansed, disinfected, and flushed by the street scavengers.

The cost of maintaining the Smallpox Hospital for the year ended December 31st, 1897, is as follows:

	£	s.	d.
Rent	19	10	0
Coal	9	16	8
Cleaning Material and Utensils	2	8	8
Water Rates	0	19	4
Advertising for Tenders for Repairing and Painting	0	5	9
	<hr/>	<hr/>	<hr/>
	£33	0	5

In addition to this an expenditure of £28 6s. 6d. was incurred in cleaning and painting throughout the premises. The work was carried out under contract by Mr. John E. Stokes, in accordance with specifications prepared by me and approved by the Joint Smallpox Committee. The specification was prepared in detail for repairing, cleansing, and painting the woodwork, ironwork, and the interior walls, the outside of house and outbuildings, and fixing new gates.

During the year periodical visits were made to the Hospital, and the house and furniture were found in a satisfactory condition.

I am pleased to report that no cases of Smallpox have been received into the Hospital during the year.

General
Condition of
Dwellings.

During my inspections throughout the District, I have directed my attention to the general condition of the inside of dwellings, but more especially in the populous parts of the District, and the various misuses which have been detected have arisen from delapidated sinks, scullery walls, and pavements. I had correspondence with the property owners, informing them of the structural defects found on the premises, which were acknowledged by them, and the complaints remedied.

In several instances I have called the attention of the tenants to the uncleanly condition of the internal walls, and given instructions for the whitewashing and cleansing of same. Whitewash brushes have been supplied to enable them to carry out the work, which was done to my satisfaction.

It is my pleasure to report that during the year considerable progress has been made in the general sanitary condition of the District, although I may here mention much remains to be done at Five Ways, but at the completion of the Sewage Scheme you may look forward to a much needed improvement in the sanitary arrangements at the dwellings in that locality.

I may add that more attention has been paid by tenants of cottage property to the cleanliness of the premises in their occupation, and the instructions which have been given on the occasion of my visits for the cleansing of drains, traps, and other sanitary conveniences have been satisfactorily carried out. In addition to this, the general knowledge which has been acquired by the people in domestic sanitation will, it is hoped prove to be an advantage in the interest of public health.

I am, Gentlemen,

Your obedient Servant,

JOHN PEAKE,

Sanitary Inspector.

Sanitary Inspector's Department,

Council Offices, Cannock,

February 10th, 1897.

SANITARY WORK FOR YEAR ENDED DECEMBER 31, 1896.

DESCRIPTION OF NUISANCES	No. of Nuisances Reported.	Formal Notices by Authority.	Preliminary Notices.	Nuisances abated after Notice.
Dwelling Houses				
| Structural Defects	3	..	3	3
| Foul Conditions	1	..	1	1
| Overcrowding	1	..	..	..
| Unfit for Habitation	6	..	4	4
House Drainage				
| Defective Traps	5	1	1	32
| Defective Drains	33	13	20	8
| No Drainage	8	5	3	
Privy & Ashpit Accommodation				
| Insufficient Privy and Ashpit Accommodation	3	2	1	3
| Reconstruction of Privies and Ashpits	54	27	27	19
| Conversion of Privies into Water Closets	7	..	7	7
Closets too near Dwelling Houses	2	..	..	1
Deposits of Refuse	1	..	1	1
Stagnant Water in Cellars	2	..	2	2
Bad Construction of Pigstyes	4	2	2	4
Pigstyes too close to Dwellings	2	1	1	1
Paved Area out of Repair	1	..	1	1
Whitewashing and Cleaning of Slaughter Houses	111	3	108	111
Offensive Trades				
Defective Water Closets	2	..	2	2
Canal Boats, Infringement of the Acts - see Special Report	9	..	9	9
Totals	248	56	192	239
ASHPITS CLEANSED				2,539

FOOD AND WATER SUPPLY.

Science of Unwholesome Food	..	..	0
Number of Houses supplied with well water which was condemned by Sanitary Authority	..	..	49
Number of Houses which the South Staffordshire Waterworks Company have supplied during the year	..	..	200

CANNOCK URBAN SANITARY AUTHORITY.

CANAL BOATS ACTS 1877 AND 1884.

Annual Report of the Inspector

FOR YEAR ENDED DECEMBER 31ST, 1896.

GENTLEMEN,

I have pleasure in presenting to you my Annual Report of the work carried out in my department under the Canal Boats Acts, 1877 and 1884, for the year ended December 31st, 1896.

During the year fifteen visits were made to the East Cannock Wharf, and eight visits to the Walk Mill Wharf, and inspected and reported to my Council a total number of 56 cabin boats.

During my inspections I have in nine instances been unable to examine the certificates, and to obtain other necessary information, owing to the captain's absence, but was able to get access in to the cabin to make an inspection.

On several occasions I have found at the wharves, more particularly at the East Cannock, a number of cabin boats which were locked up and could not be inspected. Many of these are called standing boats, which are left at the wharf to be loaded while the captain is on another voyage, in other cases the captains had gone home during Christmas holidays.

The infringements of the Acts which came under our notice were as follows:

Absence of Certificates...	...	...	3
No proper water vessel...	...	...	1
Marking ...	...	...	1
Cleanliness	...	...	1
	Total	...	9

The complaints have been dealt with as follows:

Absence of Certificate.—(7) This certificate was not ready, and a pass was produced, signed by Mr. Cowderoy, Inspector, Kidderminster. (26) Certificate was left with owner. This boat was seen again on December 30th, and the certificate produced—see No. 55. (45) This boat had been re-registered, and the certificate was not then ready. A letter was produced from the Town Clerk of Gloucester, saying that the application would be brought before the Committee.

No proper Water Vessel.—(9) Water vessel broken on the journey, another one would be purchased when the captain returned home. (10) Same remarks as No. 9. (11) Water vessel left at dock to be painted. (27) Same remarks as Nos. 9 and 10.

Marking.—(16) This boat was sold by Wm. Hunt and Sons to Fawshaw and Pinon, and the owners' name was not marked on the cabin. A letter was produced from the Inspector of Wolverhampton, saying he had examined the boat, and the certificate would be forwarded as soon as it was ready. A notice was served on the owner of the boat, and the certificate returned, signed by the Inspector of Wolverhampton.

Cleanliness.—(19) Instructions were given for the cabin to be cleansed, which was commenced before leaving the wharf.

Summary of the number of Occupants found on Canal Boats during the year:

MONTH.	MALES.	FEMALES.	CHILDREN.	Children between 5 & 12 Yrs.	Children 5 Years and under.
January
February	...	6	1	...	...
March
April	...	9	...	2	2
May	...	5	1	1	1
June	...	1	1	1	...
July	...	9	2	1	4
August	...	6	...	...	...
September	...	9	...	...	...
October	...	11	1	...	...
November	...	8	2	...	...
December	...	16	1	...	...
Totals	80	9	8	7	1

I am pleased to report that the number of children travelling on canal boats has decreased, and homes have been provided in their own towns, where they may more regularly attend school. In cases where I have found children of school age, I have made enquiries as to their absence, and was informed by the parents that they were on holidays. During my inspections I have found the general condition of the occupants and cabins satisfactory, and I am pleased to report that no cases of sickness or infectious disease was met with during the year.

I again have pleasure in reporting that during my inspections I have received courteous treatment from the masters, and every assistance has been given by them during my examinations of the boats.

I am, Gentlemen,

Your obedient Servant,

JOHN PEAKE,

Inspector of Canal Boats

Sanitary Inspector's Department,

Council Offices, Cannock,

January 4th, 1897.

